

“Jerusalem will be trampled on by the Gentiles until the times of the Gentiles are fulfilled.” (Luke 21:24)

CP1: Biblical Chronology

Earth is Old
Earth is Young

Chronology of Mankind and Its Quandary

cp1» Due to egocentricity, mindsets, poor scholarship, lost records, burnt libraries, war and other reasons, the chronology of mankind is not a simple matter. Not at all. We have chosen to use the Bible as the foundational material for our chronology in the *Chronology Papers* and we start our chronology with the Creation by God in the first year of man (YM). That is, in the first year that mankind existed we begin the chronology of the history of man. Some say the Bible was not meant to be used to ascertain the chronology of mankind. They speak of gaps in the Biblical chronology. But although the Bible’s purpose is not primarily for chronology it does have a chronology built into it. There is a line of chronology that runs through the Bible. The lack of detail in some biblical accounts will make it difficult to have an correct biblical chronology, but not impossible.

cp2» The chronology of the *Chronology Papers* is a Biblical chronology based primarily on scripture and secondarily on secular sources. We use the Bible as our main source of study because the Bible contains a chronology of about 4000 years and because the Bible has proven more trustworthy than secular sources (“Bible Paper” [BP2]). The Bible is full of old customs and an amazing amount of detail. It names cities, places, kings, nations, laws, and even dates, lots of dates. Myths do not contain vast amounts of detail. Many of the Biblical details have been confirmed in the last 150 years by archeology (see *Archaeology and the Old Testament*, by Merrill F. Unger; etc.). In the *Chronology Papers* we show that the dates of the Bible are the best source for evidence to help establish the chronology of mankind.

cp3» Contrariwise, we distrust secular sources for chronological evidence mainly because secular sources are dubious and fragmented, and

because in the past there was no universal dating system: there was no universal calendar (see CP2 & CP3). Each country, even each city, had their own calendar. Concerning the ancient Greek cities:

- “The tenth day of the month for the Corinthians is the fifth for the Athenians, and the eighth somewhere else....the beginning and the end of months in various Greek cities did not coincide....The battle of Plataea (479 BC) took place on 27 Panamos according to the Boeotian calendar, but on 4 Boedromion according to the Athenian calendar; at that time the beginning of the Athenian month came seven days later than the Boeotian...It happened, rarely, that two cities agreed to begin the months on the same day...Each *polis* had its own mode of time reckoning as it had its own month names and numerals... (pp. 32-33, *Chronology of the Ancient World*, Bickerman; in chap. 3 of *Greek and Roman Chronology*, Alan Samuel details 96 Greek calendars).

cp4» This makes it extremely difficult to interpret past secular dates. Today we use the universal dating system called the *Christian Era* system (BC-AD). From this system we can actually compare events in different parts of the earth by their chronological order. But this was not the case in the past. In the *Chronology Papers* we have connected Biblical dates with the *Christian Era* system (BC-AD). We use “absolute dates” to do this, that are based on many astronomical phenomena, not just one vague eclipse. Contrary to what many think, there are few *absolute dates* before Christ’s time. Chronological schemes based on so-called “absolute dates” using only eclipses are making a major mistake. Herein we identify a few real absolute dates and show the fatal flaw in using just one eclipse to identify ancient dates (see CP2 & 3).

Two Views of History

cp5» There are two general views of history that are polarized. One is that the cosmos is old, very old, billions of years old. The other view is that the cosmos is young, very young, only thousands of years old.

Earth is Old Theory

cp6» Those who believe that the earth is billions of years old have various theories to “prove” that the earth is billions of years old. They speak of the Uranium to Lead method of dating, or the Thorium to Lead method of dating. They speak of bones that they say are millions of years old. When you are educated in an environment that dogmatically indicates that the earth is billions of years old it is ludicrous to believe that the earth is

only thousands of years old. To believe that the earth is thousands of years old is to be uneducated or ignorant, and you are ripe for belittling by the “educated.” But every belief system has its foundations. The “earth is old” system of belief is related to the “evolutionary” system of belief. Those who believe in evolution *must* have an old earth. The magic of evolution needs billions of years of “natural selection” in order to work its miracles. But all methods of dating events and materials billions, or even millions of years old, are baseless, illusionary, and arbitrary.

Foundations for the “Earth Is Old System”

Theory of Evolution

cp7» (1) The theory of evolution is the first foundation for the “earth is old” theory. Evolution needs an old earth for its development. There are numerous works that examine the theory of evolution (see list in *Beginning Papers*). Because the theory of evolution needs an old earth, it found an old earth through selective perception. Any method that indicates a great age is an acceptable method for evolutionists. Any method that indicates a young earth is a rejectable method for evolutionists. Evolutionists don’t even feel a need to examine other points of view. Their minds are made up. They have a mindset. Their selective perception reaffirms to them each day that evolution is correct. Thus, any method that proves an old earth is correct; any method that proves the contrary is foolishness.

Radioactive Dating Methods

cp8» (2) The radioactive dating method is the second foundation for the “earth is old” theory. All radioactive dating methods start with a parent element which through radioactive decay turns into a daughter element. The decay rate is measured in half lives. The half life of Uranium 238 is said to be about 4.5 billion years. A unit of Uranium 238 turns into $\frac{1}{2}$ lead and $\frac{1}{2}$ Uranium after about 4.5 billion years. The Uranium 238 is the parent element and Lead 206 is the end or final daughter element. There are other daughter elements between Uranium 238 and Lead 206. For example, Uranium 238 first decays into the daughter element Thorium 234 after about 4.5 billion years, and then after about 25 days turns into Protactinium 234, then after 1 minute turns into Uranium 234, then after 300,000 years turns into Thorium 230, then after 80,000 years turns into Radium 226, then after 1600 years turns into Radon 222, then after 4 days turns into Polonium 218, and continues its decay until it reaches Lead 206 (Krauskopf and Beiser, *Fundamentals of Physical Science*, 5th Ed., p. 252, see p. 562).

cp9» If the rate of decay is constant, then we have a clock in which to tell time, if, and only if, we know the ratio of Uranium 238 in the earth compared to Lead when the earth was formed/created, either by God or by the magical evolution. Because the decay rate of Uranium 238 is so slow compared to the decay rates of other elements in the series only the amount of the end daughter, Lead 206, is considered when ascertaining the age of the rock. The earth is believed to be about 5 billion years old according to evolutionists. But, of course, 5 billion years ago there was no man to observe the ratio of Uranium in the rocks compared to Lead. It is nothing but guesswork and nothing else when someone arbitrarily says that at the beginning there was such and such ratio of Uranium as compared to Lead. Guesswork is not scientific work.

Constant Decay Rates?

cp10» Furthermore it was believed at first that these decay rates were constant.

“Radioactivity was discovered by Becquerel in 1896. In 1906, Millikan stated, ‘Radioactivity has been found to be independent of all physical as well as chemical conditions. The lowest cold or greatest heat does not appear to affect it in the least. Radioactivity seems to be as unalterable a property of the atoms of radioactive substances, as is weight itself.’ This state of mind established the modern view, which is quite generally held today.... The electroscope and spinthroscope were used in early study of radioactive alpha-decay rates. The inherent limitations of these early instruments led to erroneous conclusions:

- That radioactive decay rates are constant.
- That these rates cannot be altered by change of the energy state of the electrons orbiting the nucleus.
- That radioactivity results from processes which involve only the atomic nucleus.

Refinements in electronics resulted in the development of sophisticated counting apparatus. The equipment was used in the demonstration by several investigators (1949-73) of rather easily induced changes in the disintegration rates of 14 radionuclides, including ^{14}C , ^{60}Co , and ^{137}Cs . **The observed variations in the decay rates, (changes in the half life) were produced by changes in pressure, temperature, chemical state, electric potential stress of monomolecular layers, etc. ... The decay ‘constant’ is now**

considered to be a variable.” [H.C. Dudley, *The Morality of Nuclear Planning*, 1976, p. 52ff; my emphasis; see G. T. Emery, “Perturbations of Nuclear Decay Rates,” *Ann. Review Nucl. Science*, vol. 22, (1972), p. 165; **and** see H.C. Dudley, “Radioactivity Re-Examined,” *Chemical and Engineering News*, April 7, 1975, p. 2.]

cp11» Even a small amount of variation in the decay rate can make a big difference in the assumed age of the rock:

“Measurement of nuclear disintegration parameters has been done for about fifty years. To my knowledge no major research effort has been mounted to determine whether nuclear decay parameters vary at all with time [he is speaking of time not pressure, chemical state, etc]. Once values of the decay index for a particular nuclide are obtained and a particular value is agreed upon, this value is generally accepted. Usually no further measurements are taken....

If a small amount of exponential variation occurs in the nuclear decay index, then the half lives of the radiometric nuclides are drastically reduced — orders of magnitude. In the case of U 238 the half life is reduced by a factor of 10^5 ” (Theodore W. Rybka, *ICR Impact Series* No. 106)

Decay Rates not Constant; Atomic Clocks not Constant

cp12» As we see above temperature, pressure, chemical state, and other factors do change the decay rate of radioactive elements, and this drastically changes the so-called clock of radioactivity. Atomic clocks even seem to change their rates of decay by the direction in which they travel in an airplane. Those going westward gained time; those going eastward lost time (Hafele, Keating, 1972, “Around-the-world atomic clocks,” *Science* 177 [4044]). Diurnal variation, or daily variation (shortly after sunrise), of atomic clocks have been observed (D. S. Sader and B. D. Au, *Nature*, 224, 291, 1969).

Radiohalos

cp13» Robert V. Gentry’s work on radiohalos has cast a shadow on the premise that the decay rates are constant. “Radiohalos” are microscopic, ring-like discolorations caused by radioactivity in certain minerals. Early work seemed to indicate that the radiohalos exhibited dimensions predictable on the basis of modern decay rates. But Gentry who worked at the Chemistry Division of the Oak Ridge National Laboratory in the 1960’s “set out to review previous work on the subject, then began his own painstaking study of thousands of halos in rocks from around the world.

Almost immediately he found that all was not in order in this long neglected field. Gentry discovered that, although uranium halos, for example, are readily identifiable by the number and relative rough diameters of their rings, their actual dimensions often vary substantially, even within a single crystal” (Ralph E. Juergens, “Radiohalos and Earth History,” *Kronos*, III:1, pp 7 ff; read article, and Gentry’s articles noted in footnotes). Gentry has shown that the “halos furnish no proof that [the decay constant] is constant” (Gentry, *Science*, April 5, 1974, pp 62-66; Also see Don B. De Young, “The Precision of Nuclear Decay Rates,” *CRSQ*, Vol. 13, No 1 [1976]; and John Lynde Anderson and George W. Spangler, “Radiometric Dating: Is the ‘Decay Constant’ Constant?,” *Pensee*, Vol 4 No. 4 [1974]; *Scientific Creationism*, 2nd Ed., 1985, Chapter VI; and other works.).

Dubious Premises

cp14» Evolutionists use the elements with the slowest rates of decay to measure the age of the earth, and they use the highest ratio of the parent element to daughter element at the time of formation/creation in order to give a high age. Remember there were no human observations made at formation/creation to help establish the correct ratio. The ratio may have been low. Thus, even if the Uranium-Lead method is correct, the earth is still young since there was a low ratio at first.

Different Methods of Dating Don’t Agree

cp15» There is also the problem of variation of the ages arrived at by using various elements and methods to date the earth. One system of dating gives one date, another gives a contradictory date. Or one set of rocks gives one age, while another set of rocks gives a different age for the earth. What does the believer in the “earth is old” theory do? With the Carbon 14 dating method (C14) they merely pick the result they wanted to begin with, “If a C14 date supports our theories, we put it in the main text. If it does not entirely contradict them, we put it in a footnote. And if it is completely ‘out of date,’ we just drop it” (T. Save-Soderbergh, “Carbon 14 and Egyptian Chronology,” *Nobel Symposium 12 Radiocarbon Variations and Absolute Chronology*, Stockholm, Almquist and Wikwell, p. 35; quotes from R.D. Long, *CRSQ*, Vol 10, No 1, p. 19; *Science, Scripture, and the Young Earth*, 1989 Edition, pp.42ff). This is the way some quote the Bible. If a verse agrees with a belief it is quoted, if not it is ignored. And this is like the “identification game” used in astronomical retro-calculations (see CP2).

Great Age and Distances in Space Based on the Redshift Method

Redshift “Foundation”

cp16» (3) Great distances in space is the third foundation for the “earth is old” theory. The “earth is old” group believes in such things as the “big-bang” theory, where the universe is expanding, if we interpret the wavelength shifts (redshift) as velocities. Alternatively, there is the pulsating universe theory: The universe is now expanding (based still on the redshift theory), but eventually the expansion will cease and contraction will set in. No age can be ascertained from this theory. Thus the evolutionists use the big-bang theory to age the universe. All matter came from a big explosion and has been spreading out ever since. Since the earth to them is billions of years old, then the matter in the universe has been traveling after the explosion for billions of years. Matter has spread out great distances since the beginning. Magically they have found methods that “prove” great distances in space. They use the red-shift method for dating the universe, for the proof of galaxies (formerly called “white nebulae”), and for the great distances between stars and other objects in space. But others have shown the very shaky foundation of this red-shift method (See *Science Papers*; Field, Arp, and Bahcall, *Red-Shift Controversy*, 1973; Herbert Dingle, *Science at the Crossroads*, 1972; Halton Arp, *Seeing Red: Redshifts, Cosmology and Academic Science*, Apeiron, Montreal, 1998; etc.).

cp17» Quotes:

- **The essence of the Big Bang cosmology** is an expanding universe. The redshift of light from galaxies is proportional to their distance (as inferred from brightness). No cause of galaxy redshift other than a velocity away from the observer was considered plausible, so Hubble’s result was taken to mean that the farther away from us a galaxy is, the faster it moves away from us. Hence, the overall universe had to be expanding. Of course, the redshift still might be caused by something other than velocity. (Tom Van Flandern, *Dark Matter, Missing Planets & New Comets*, 1998, p. 390)
- **Hubble’s “Impossible” Galaxies Materialize Like Magic:** Not until 1925 was it definitely decided whether they (nebulae [space dust]) belonged to our Galaxy, or represented remote island universes as Kant had suspected... Edwin Hubble specialized in the peculiar problems of nebular photography.... Picture after picture showed the expected red shift of the spectra, which meant that the nebulae were fleeing from us.... Moreover, the too-perfect

mathematical relationship between the distance of the nebulae and the red shift aroused suspicion. Perhaps light changed its wave length during such tremendous journeys, losing energy and arriving at our instruments redder than it was when it started. Perhaps the total gravitation of the universe affected the light, and the red shift could be explained as an Einstein effect.... Astronomers at any given time look at nebulae of such different ages that the question must be raised: have they any right to compare them with one another? Hubble decided on a complicated *experimentum crucis*. It contained so many possible sources of error, made so many dubious assumptions, that the slightest alteration in a figure would change a result to its opposite. Nevertheless, Hubble believed that the experiment proved his conclusion: the red shift actually indicates retreating nebulae; that the extragalactic universe is steadily expanding. (Rudolf Thiel [translated from the German by Richard and Clara Winston], *And There was Light*, Alfred A. Knopf, NY, 1957, pp 384-389)

- **Galaxies Close by:** When the *Atlas* was complete, I discovered that across my most disturbed peculiars were pairs of radio sources. Very nice. Obviously the disturbance had been caused by the ejection of the radio sources. Then came the shock: some of the radio sources turned out to be quasars! And the galaxies were not at great distances, but relatively close by.” (Halton Arp, *Seeing Red*, p. 6)
- **Redshift not Cosmological:** H. Arp has pointed out that quasi-stellar objects and peculiar galaxies occur together with a frequency greater than that of a chance coincidence; therefore certain quasi-stellar objects are associated with peculiar galaxies which we know are not at extremely great distances. Therefore the redshifts are not cosmological, i.e., a result of Hubble’s law... It may well be that there is another cause for the observed redshifts. Then Arp’s final suggestion, “some as yet unknown cause,” would be correct. (Baker and Fedrick, *An Introduction to Astronomy*, 7th ed, pp. 336-37)

- **What else can cause redshift?**

Tired Light: If the redshift of galaxies is not due to expansion velocity, then what might cause the redshift? ... Basically, anything that causes light to lose energy will cause a redshift. “Tired light” theory, in which intergalactic matter is supposed to be responsible for the energy loss of light. (Tom Van Flandern, *Dark Matter, Missing Planets & New Comets*, 1998, p. 398)

Loss of Energy: The essential property which must be present to produce a redshift of light is a loss of energy. The most common

way to produce a loss of light energy is a recessional velocity. Another way is by having light climb out of a strong gravitational field. Still another way is travel through a resisting medium. (Tom Van Flandern, *Dark Matter...*, p. 92)

- **Redshift is Impossible to Disprove.** Because there is no other parameter besides redshift that is easily observable in a faint, featureless galaxy, the custom of assigning the distance to such a galaxy according to the size of its redshift has become established. If a galaxy has a faint apparent magnitude for its redshift, we say it is under luminous or a dwarf, and the reverse if it is apparently bright for its measured redshift. I wish to emphasize that there is no way of ever producing any discordance with the redshift-distance relation for even one single object when operating from the base of current assumptions. This is true because no matter where a galaxy point falls in the redshift-apparent magnitude diagram its position can be explained in terms of high or low intrinsic luminosity. For example, the quasars fall generally above the Hubble line in the redshift-apparent magnitude diagram, but they are not concluded to have excess redshift – they are instead said to have excess luminosity.... In the past, of course, any discordantly high redshifts measured in a cluster were simply assumed to be background galaxies without any further investigation. (Arp, *The Redshift Controversy*, 1973, p. 17)
- **Because it is impossible to disprove, it is in fact not a scientific theory, but a dogmatic myth:** Today any newspaper, science magazine or discussion of scientific funding will take for granted that we know all the basic facts: that we live in an expanding universe, all created in an instant out of nothing, in which cosmic bodies started to condense from a hot medium about 15 billion years ago.... For those who have examined the evidence on redshifts and decided the redshifts are not primarily velocity, however, the important question arises as to how a disproved assumption could have become so dominant.... But in this field the adjustable parameters are endless and one never hears the crucial words: “It just won’t work, we have to go back and reconsider our fundamental assumptions.” (Halton Arp, *Seeing Red*, p. 257)
- **The reason Arp finding have been resisted:** The conventional viewpoint assumes that all galaxy redshifts are due only to Doppler velocities of recession. Therefore, if we can produce just one example of a redshift difference that cannot be explained as a velocity difference, then we have broken the assumption on which the redshift-distance relation is always applied to derive distances.

(Arp, *The Redshift Controversy*, 1973, p. 17) **Arp's book, *Seeing Red*, manifest his findings of discordant readings and his struggle to get the "scientific" world to acknowledge them.** They won't acknowledge the discrepancies because then their whole careers will then seemed to have been a waste of time. Egos won't allow it.

- **Peer Pressure, not Review:** The reaction of most of the audience was nil. As usual younger astronomers were frightened for their careers. The established astronomers were inured to disregarding observational proofs from certain pariahs which would invalidate the assumptions on which they had built their careers. Some local researchers afterwards showed me privately some evidence that they had uncovered. But there was no one to encourage and shelter them so nothing more has been heard from them. The two protectors of the orthodoxy on the organizing committee, however, felt obliged to supply some reasons why the observations should be disregarded. (H. Arp, <http://www.haltonarp.com/?Page=Abstracts&ArticleId=4>).
- **Scientists**, particularly at the most prestigious institutions, regularly suppress and ridicule findings which contradict their current theories and assumptions. (Halton Arp, *Seeing Red*, p. 12)
- **Amateurs** have a much better grasp of the realities of astronomy because they really *look* at pictures of galaxies and stars. Professionals start out with a theory and only see those details which can be interpreted in terms of that theory. (Halton Arp, *Seeing Red*, p. 23)

Who is Halton Arp?

cp18» Halton C. Arp received his Bachelors degree from Harvard College in 1949 and his Ph.D. from California Institute of Technology in 1953, both cum laude. He is a professional astronomer who, earlier in his career, conducted Edwin Hubble's nova search in M31. He has earned the Helen B. Warner prize, the Newcomb Cleveland award and the Alexander von Humboldt Senior Scientist Award. For 28 years he was staff astronomer at the Mt. Palomar and Mt. Wilson observatories. While there, he produced his well known catalog of "Peculiar Galaxies" that are disturbed or irregular in appearance. (Statement from Arp's web site, July 2006) "My career at the Observatories in Pasadena slightly overlapped Edwin Hubble's. He personally gave me my first job." (Halton Arp, *Seeing Red*, p. 8)

Foundations for the “Earth is Young System”

cp19» (1) No Scientific Evidence For Evolution. The first foundation for the “earth is young” theory is the lack of real evidence that the earth is old. There is sound evidence against the red-shift method for ascertaining distances in space, against radioactive dating methods, and all other methods of dating the earth as old (see *Science Papers*; Jeremy Rifkin, *Algeny*, 1983; Field, Arp, and Bahcall, *Red-Shift Controversy*, 1973; John C. Whitcomb and Henry M. Morris, *The Genesis Flood*, 1961; etc.).

cp20» (2) Proof that the Earth is Young. The second foundation for the “earth is young” theory are the *many* methods that prove the earth is young. They are at least 76 methods that prove the earth can not be older than 500 million years and of these 24 indicate that the earth is no older than 20,000 years. These methods include such things as the influx of titanium, or cobalt, or zinc, or mercury, or silver, or copper, or gold, or silicon, or nickel into ocean via rivers. If the earth was billions of years old, the ocean would be a soup of pollution without any life in it. And such methods as the influx of meteoritic dust from space, or development of total human population, or lack of vast amounts of ancient cultural debris, the decay of the earth’s magnetic field, the decay of C-14 in pre-Cambrian wood, the growth of active coral reefs, the formation of river deltas, decay of short-period comets, and the instability of rings of Saturn show a young earth. These 76 methods are based on the assumption that there were constant rates, no initial daughter components, and all were in a closed system. These methods lead to an even younger age for the earth if, for example, there were some initial daughter components at the beginning (see *Scientific Creationism*, 2nd Ed., Chapter VI; Harold S. Slusher, *Age of the Cosmos*; Henry M. & John D. Morris, *Science, Scripture, and the Young Earth*, 1989 Edition, Chapter 8; Henry M. Morris, “The Young Earth,” *ICR Impact Series*, No. 17).

cp21» (3) Biblical Chronology. The third foundation of the “earth is young” theory is the belief in the Biblical chronology, or in creation without mixing the false theory of evolution into the picture. And this in turn is based on the proof that the Bible is a sound document, more sound than any other ancient document (“Bible Paper” [BP3]). And this in turn is the belief in a powerful God, not a belief in a powerless and mystical God or the false belief in the magical evolution.

cp22» Your Mindset Limits You. What system you believe in depends on your belief, your research on *both* belief systems, your biases, your world view, and your mindset (perceptual set). The more you research different points of view, the more you see that the world sees through filters that

color its perception of reality. To the Evolutionist the world is old. To the Creationist the world is young. It is difficult for either group to prove their case to the other group. Since the only witness to the Beginning (Creation) was either the powerful God or the magic of Evolution, it is only through inductive thinking that we can come to a conclusion. We must piece evidence upon evidence. But for most of us our “mindset” or “world view” interferes with our judgment. We see what we want to see and subconsciously disregard what we do not want to see.

Before we examine Biblical chronology, we must look carefully at secular chronology.

